

Subs	titute for form 1449/PT	0		Complete if Known		
				Application Number	10/583,280 - Conf. # 2639	
IN	<b>FORMATIC</b>	ON DIS	CLOSURE	Filing Date	June 16, 2006	
STATEMENT BY APPLICANT				First Named Inventor	Charles Sawyers	
				Art Unit	1636	
(Use as many she ets as necessary)			ecess ary)	Examiner Name	Nancy S. Vogel	
Sheet	1	of	7	Attorney Docket Number	58086-232451	

U.S. PATENT DOCUMENTS							
Examiner Initials*	Cite No.1	Document Number  Number-Kind Code <sup>2</sup> ( if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear		
,	A1	4,097,578	06-27-1978	Perronnet et al.			
	A2	4,399,216	08-16-1983	Axel et al.			
	A3	4,559,157	12-17-1985	Smith et al.			
	A4	4,608,392	08-26-1986	Jacquet et al.			
	A5	4,820,508	04-11-1989	Wortzman			
	A6	4,938,949	07-03-1990	Borch et al.			
	A7	4,992,478	02-12-1991	Geria			
	A8	5,010,182	04-23-1991	Brake et al.			
	A9	5,411,981	05-02-1995	Gaillard-Kelly et al.			
	A10	5,434,176	07-18-1995	Claussner et al.			
	A11	5,656,651	08-12-1997	Sovak et al.			
	A12	5,705,654	01-06-1998	Claussner et al.			
	A13	5,750,553	05-12-1998	Claussner et al.			
	A14	5,985,868	11-16-1999	Gray			
	A15	6,087,509	07-11-2000	Claussner et al.			
	A16	6,479,063	11-12-2002	Weisman et al.			
	A17	6,506,607	01-14-2003	Shyjan			
	A18	2004/0009969	01-15-2004	Cleve et al.			
	A19	2002/0133833 A1	09-19-2002	Sawyers et al.			
	A20	6,828,471	12-07-04	Sawyers et al.			

Examiner Date Signature Considered			
	Examiner	Date	
	Signature	Considere	d

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number. Complete if Known Substitute for form 1449/PTO Application Number 10/583,280 - Conf. # 2639 INFORMATION DISCLOSURE Filing Date June 16, 2006 STATEMENT BY APPLICANT First Named Inventor Charles Sawyers Art Unit 1636 (Use as many sheets as necessary) Examiner Name Nancy S. Vogel Sheet 2 7 Attorney Docket Number 58086-232451 of

			FOREIGN	PATENT DOCUMENTS		
Examiner Initials*	Cite No.1	Foreign Patent Document  Country Code <sup>3</sup> -Number <sup>4</sup> -Kind  Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Do cument	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>®</sup>
	B1	EP 362,179	04-04-1990	Smithkline Beecham Corporation		
	B2	WO 00/17163 (with English abstract)	03-30-2000	Yamanouchi Pharmaceutical Co., Ltd., et al.	1	
	В3	WO 90/13646 (with English abstract)	11-15-1990	Transgene S.A. Achstetter, et al.		
	B4	WO 97/00071	01-03-1997	Biophysica Foundation Sovak, et al.		
	B5	WO 2005/099693	10-27-2005	The Regents of the University of California		
	B6	WO 2006/124118	11-23-2006	The Regents of the University of California		
	В7	WO 2005/059109	06-30-2005	The Regents of the University of California		

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No.1	Include name of the author ( in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
	C1	Karp et al., Cancer Res. 56: 5547-5556.	
	C2	Ausubel et al., Current Protocols in Molecular Biology, Wiley Interscience Publishers, (1995).	
	СЗ	Sambrook et al., Molecular Cloning: A Laboratory Manual 2 <sup>nd</sup> edition (1989) Cold Spring Harbor Laboratory Press, Cold Spring Harbor, N.Y.	
	C4	Chang et al., Science 240 (4850), 324-326 (1988).	
	C5	NM_000044	

Examiner	Date	
Signature	Considered	

Substitute for form 1449/PTO				Complete if Known		
				Application Number	10/583,280 - Conf. # 2639	
INF	FORMATIO	N DISC	CLOSURE	Filing Date	June 16, 2006	
STATEMENT BY APPLICANT			PLICANT	First Named Inventor	Charles Sawyers	
				Art Unit	1636	
(Use as many she ets as necess ary)			cess ary)	Examiner Name	Nancy S. Vogel	
Sheet	3	of	7	Attorney Docket Number	58086-232451	

C13	Kingsman et al., <u>Gene, 7</u> : 141 (1979).	
C14	Tschumper et al., <u>Gene</u> , <u>10</u> : 157 (1980).	
C15	Jones, <u>Genetics</u> , <u>85</u> :12 (1977).	
C16	Feldman, B.J. & Feldman, D. The development of androgen-independent prostate cancer. Nat Rev Cancer 1, 34-45 (2001).	
C17	Gelmann, E.P. Molecular biology of the androgen receptor. J Clin Oncol 20, 3001-15 (2002).	
C18	Balk, S.P. Androgen receptor as a target in androgen-independent prostate cancer. Urology 60, 132-8; discussion 138-9 (2002).	
C19	Taplin, M.E. et al. Selection for androgen receptor mutations in prostate cancers treated with androgen antagonist. Cancer Res 59, 2511-5 (1999).	
C20	Taplin, M.E. et al. Androgen receptor mutations in androgen-independent prostate cancer: Cancer and Leukemia Group B Study 9663. J Clin Oncol 21, 2673-8 (2003).	
C21	Visakorpi, T. et al. In vivo amplification of the androgen receptor gene and progression of human prostate cancer. Nat Genet 9, 401-6 (1995).	
C22	Taplin, M.E. et al. Mutation of the androgen-receptor gene in metastatic androgen-independent prostate cancer. N Engl J Med 332, 1393-8 (1995).	
C23	Veldscholte, J. et al. A mutation in the ligand binding domain of the androgen receptor of human LNCaP cells affects steroid binding characteristics and response to anti-androgens. Biochem Biophys Res Commun 173, 534-40 (1990).	
C24	Matias, P.M. et al. Structural basis for the glucocorticoid response in a mutant human androgen receptor (AR(ccr)) derived from an androgen-independent prostate cancer. J Med Chem 45, 1439-46 (2002).	
C25	Craft, N., Shostak, Y., Carey, M. & Sawyers, C.L. A mechanism for hormone-independent prostate cancer through modulation of androgen receptor signaling by the HER-2/neu tyrosine kinase. Nat Med 5, 280-5 (1999).	
C26	Gioeli, D. et al. Androgen receptor phosphorylation. Regulation and identification of the phosphorylation sites. J Biol Chem 277, 29304-14 (2002).	
C27	Kato, S. et al. Activation of the estrogen receptor through phosphorylation by mitogen-activated protein kinase. Science 270, 1491-4 (1995).	
C28	Font de Mora, J. & Brown, M. AIB1 is a conduit for kinase-mediated growth factor signaling to the estrogen receptor. Mol Cell Biol 20, 5041-7 (2000).	
C29	Tremblay, A., Tremblay, G.B., Labrie, F. & Giguere, V. Ligand-independent recruitment of SRC-1 to estrogen receptor beta through phosphorylation of activation function AF-1. Mol Cell 3, 513-9 (1999).	
C30	Gregory, C.W. et al. A mechanism for androgen receptor-mediated prostate cancer recurrence after androgen deprivation therapy. Cancer Res 61, 4315-9 (2001).	
C31	Li, P. et al. Heterogeneous expression and functions of androgen receptor co-factors in primary prostate cancer. Am J Pathol 161, 1467-74 (2002).	
C32	Glass, C.K. & Rosenfeld, M.G. The coregulator exchange in transcriptional functions of nuclear receptors. Genes Dev 14, 121-41 (2000).	

Examiner	Date	
Signature	Considered	l I

Sub	ostitute for form 1449/PTO			Complete if Known		
				Application Number	10/583,280 - Conf. # 2639	
11	<b>NFORMATION</b>	N DI	SCLOSURE	Filing Date	June 16, 2006	
S	TATEMENT	BY A	APPLICANT	First Named Inventor	Charles Sawyers	
				Art Unit	1636	
	(Use as many she ets as necess ary)			Examiner Name	Nancy S. Vogel	
Sheet	4	of	7	Attorney Docket Number	58086-232451	

С	Raffo, A.J. et al. Overexpression of bcl-2 protects prostate cancer cells from apoptosis in vitro and confers resistance to androgen depletion in vivo. Cancer Res 55, 4438-45 (1995).
С	McDonnell, T.J. et al. Expression of the protooncogene bcl-2 in the prostate and its association with emergence of androgen-independent prostate cancer. Cancer Res 52, 6940-4 (1992).
С	Kinoshita, H. et al. Methylation of the androgen receptor minimal promoter silences transcription in human prostate cancer. Cancer Res 60, 3623-30 (2000).
С	Shang, Y., Myers, M. & Brown, M. Formation of the androgen receptor transcription complex. Mol Cell 9, 601-10 (2002).
С	Zhau, H.Y. et al. Androgen-repressed phenotype in human prostate cancer. Proc Natl Acad Sci U S A 93,15152-7 (1996).
С	Wainstein, M.A. et al. CWR22: androgen-dependent xenograft model derived from a primary human prostatic carcinoma. Cancer Res 54, 6049-52 (1994).
С	Ellis, W.J. et al. Characterization of a novel androgen-sensitive, prostate-specific antigen-producing prostatic carcinoma xenograft: LuCaP 23. Clin Cancer Res 2, 1039-48 (1996).
С	Horoszewicz, J.S. et al. LNCaP model of human prostatic carcinoma. Cancer Res 43, 1809-18 (1983).
С	Klein, K.A. et al. Progression of metastatic human prostate cancer to androgen independence in immunodeficient SCID mice. Nat Med 3, 402-8 (1997).
C	Perou, C.M. et al. Molecular portraits of human breast tumors. Nature 406, 747-52 (2000).
C	Gregory, C.W., Johnson, R.T., Jr., Mohler, J.L., French, F.S. & Wilson, E.M. Androgen receptor stabilization in recurrent prostate cancer is associated with hypersensitivity to low androgen. Cancer Res 61, 2892-8. (2001).
C	Huang, Z.Q., Li, J. & Wong, J. AR possess an intrinsic hormone-independent transcriptional activity. Mol Endocrinol 16, 924-37 (2002).
C	Matias, P.M. et al. Structural evidence for ligand specificity in the binding domain of the human androgen receptor. Implications for pathogenic gene mutations. J Biol Chem 275, 26164-71 (2000).
C	Lobaccaro, J.M. et al. Molecular modeling and in vitro investigations of the human androgen receptor DNA-binding domain: application for the study of two mutations. Mol Cell Endocrinol 116, 137-47 (1996).
C	Migliaccio, A. et al. Steroid-induced androgen receptor-oestradiol receptor beta-Src complex triggers prostate cancer cell proliferation. Embo J 19, 5406-17 (2000).
C	Kousteni, S. et al. Nongenotropic, sex-nonspecific signaling through the estrogen or androgen receptors: dissociation from transcriptional activity. Cell 104, 719-30 (2001).
C	Manolagas, S.C., Kousteni, S. & Jilka, R.L. Sex steroids and bone. Recent Prog Horm Res 57, 385-409 (2002).

Examiner		T
Examiner	Date	
Signature	Considered	
Signature	Considered	

Substitute for form 1449/PTO			-	Complete if Known		
ı				Application Number 10/583,280 - Conf. # 263		
11	NFORMATION	1 DI	SCLOSURE	Filing Date	June 16, 2006	
S	TATEMENT E	BY /	APPLICANT	First Named Inventor	Charles Sawyers	
i				Art Unit	1636	
	(Use as many she	e ets as	necess ary)	Examiner Name	Nancy S. Vogel	
Sheet	5	of	7	Attorney Docket Number	58086-232451	

C50	DePrimo, S.E. et al. Transcriptional programs activated by exposure of human prostate cancer cells to androgen. Genome Biol 3, RESEARCH0032 (2002).	
C51	Masiello, D., Cheng, S., Bubley, G.J., Lu, M.L. & Balk, S.P. Bicalutamide functions as an androgen receptor antagonist by assembly of a transcriptionally inactive receptor. J Biol Chem 277, 26321-6 (2002).	
C52	Edwards, J., Krishna, N.S., Grigor, K.M. & Bartlett, J.M. Androgen receptor gene amplification and protein expression in hormone refractory prostate cancer. Br J Cancer 89, 552-6 (2003).	
C53	Laitinen, S., Karhu, R., Sawyers, C.L., Vessella, R.L. & Visakorpi, T. Chromosomal aberrations in prostate cancer xenografts detected by comparative genomic hybridization. Genes Chromosomes Cancer 35, 66-73 (2002).	
C54	Grad, J.M., Dai, J.L., Wu, S. & Burnstein, K.L. Multiple androgen response elements and a Myc consensus site in the androgen receptor (AR) coding region are involved in androgen-mediated up-regulation of AR messenger RNA. Mol Endocrinol 13, 1896-911 (1999).	
C55	Craft, N. et al. Evidence for clonal outgrowth of androgen-independent prostate cancer cells from androgen-dependent tumors through a two-step process. Cancer Res 59,5030-6 (1999).	
C56	Ellwood-Yen, K. et al. Myc-driven murine prostate cancer shares molecular features with human prostate tumors. Cancer Cell 4, 223-38 (2003).	
C57	Wang, S. et al. Prostate-specific deletion of the murine Pten tumor suppressor gene leads to metastatic prostate cancer. Cancer Cell 4, 209-21 (2003).	
C58	Shiau, A.K. et al. The structural basis of estrogen receptor/coactivator recognition and the antagonism of this interaction by tamoxifen. Cell 95, 927-37 (1998).	
C59	Norris, J.D. et al. Peptide antagonists of the human estrogen receptor. Science 285, 744-6 (1999).	
C60	Baek, S.H. et al. Exchange of N-CoR corepressor and Tip60 coactivator complexes links gene expression by NF-kappaB and beta-amyloid precursor protein. Cell 110, 55-67 (2002).	
C61	Shang, Y. & Brown, M. Molecular determinants for the tissue specificity of SERMs. Science 295, 2465-8 (2002).	
C62	Schellhammer, P.F. et al. Prostate specific antigen decreases after withdrawal of antiandrogen therapy with bicalutamide or flutamide in patients receiving combined androgen blockade. J Urol 157, 1731-5 (1997).	
C63	Sack, J.S. et al. Crystallographic structures of the ligand-binding domains of the androgen receptor and its T877A mutant complexed with the natural agonist dihydrotestosterone. Proc Natl Acad Sci U S A 98, 4904-9 (2001).	
C64	Zhou, Z.X., Sar, M., Simental, J.A., Lane, M.V. & Wilson, E.M. A ligand-dependent bipartite nuclear targeting signal in the human androgen receptor. Requirement for the DNA-binding domain and modulation by NH2-terminal and carboxyl-terminal sequences. J Biol Chem 269, 13115-23 (1994).	

	<del></del>		
Examiner		Date	
Signature		Considered	i
		0.0	

Substitute for form 1449/PTO				Complete if Known			
				Application Number	10/583,280 - Conf. # 2639		
IN.	<b>IFORMATION</b>	1 DI	SCLOSURE	Filing Date	June 16, 2006		
STATEMENT BY APPLICANT				First Named Inventor	Charles Sawyers		
				Art Unit	1636		
(Use as many she ets as necessary)			necess ary)	Examiner Name	Nancy S. Vogel		
Sheet	6	of	7	Attomey Docket Number	58086-232451		

M.G., and Sawyers, C.L., Molecular determinants of resistance to antiandrogen therapy, Nat. Med., 10: 33-39, 2004.	
The Pharmacological Basis of Therapeutics, Goodman and Gilman, eds., Macmillan Publishing Co., New York.	
The Practice of Medicinal Chemistry, Camille G. Wermuth et al., Ch 31, (Academic Press, 1996).	
Design of Prodrugs, edited by H. Bundgaard, (Elsevier, 1985).	
A Textbook of Drug Design and Development, P. Krogsgaard-Larson and H. Bundgaard, eds. Ch 5, pgs 113-191 (Harwood Academic Publishers, 1991).	
Remington: The Science and Practice of Pharmacy, 19 <sup>th</sup> Edition, Gennaro (ed.) 1995, Mack Publishing Company, Easton, PA.	
Teutsch, G.; Goubet, F.; Battmann, T.; Bonfils, A.; Bouchoux, F.; Cerede, E.; Gofflo, D.; Gaillard-Kelly, M.; Philibert. D <i>J. Steroid Biochem. Molec. Biol.</i> <b>1994</b> , <i>48</i> , 111-119.	
Van Dort, M. E.; Robins, D. M.; Wayburn, B. J. Med. Chem. 2000, 43, 3344-3347.	
Homma,S., et al., "Differential levels of human leukocyte antigen-class I, multidrug- resistance 1 and androgen receptor expressions in untreated prostate cancer cells:	
Cai, C., et al., "c-Jun has multiple enhancing activities in the novel cross talk between the androgen receptor and Ets variant gene 1 in prostate cancer", Mol.	
Su,Q.R., et al., "Polymorphisms of androgen receptor gene in childhood and adolescent males with first-onset major depressive disorder and associationwith	
Brockschmidt, F.F., et al., "The two most common alleles of the coding GGN repeat in the androgen receptor gene cause differences in protein function", J. Mol.	
Hamilton-Reeves, J.M., et al, "Isoflavone-rich soy protein isolate suppresses androgen receptor expression without altering estrogen receptor-beta expression or serum hormonal profiles in men at high risk of prostate cancer", J. Nutr. 137 (7), 1769-1775 (2007).	
Sweet, C.R., et al., " A unique point mutation in the androgen receptor gene in a family with complete androgen insensitivity syndrome", Fertil. Steril. 58 (4), 703-707 (1992).	
Batch, J.A., et al., "Androgen receptor gene mutations identified by SSCP in fourteen subjects with androgen insensitivity syndrome", Hum. Mol. Genet. 1 (7), 497-503 (1992).	
Wooster,R., et al., " A germline mutation in the androgen receptor gene in two brothers with breast cancer and Reifenstein syndrome", Nat. Genet. 2 (2), 132-134 (1992).	
	therapy, Nat. Med., 10: 33-39, 2004.  The Pharmacological Basis of Therapeutics, Goodman and Gilman, eds., Macmillan Publishing Co., New York.  The Practice of Medicinal Chemistry, Camille G. Wermuth et al., Ch 31, (Academic Press, 1996).  Design of Prodrugs, edited by H. Bundgaard, (Elsevier, 1985).  A Textbook of Drug Design and Development, P. Krogsgaard-Larson and H. Bundgaard, eds. Ch 5, pgs 113-191 (Harwood Academic Publishers, 1991).  Remington: The Science and Practice of Pharmacy, 19 <sup>th</sup> Edition, Gennaro (ed.) 1995, Mack Publishing Company, Easton, PA.  Teutsch, G.; Goubet, F.; Battmann, T.; Bonfils, A.; Bouchoux, F.; Cerede, E.; Gofflo, D.; Gaillard-Kelly, M.; Philibert. D. J. Steroid Biochem. Molec. Biol. 1994, 48, 111-119.  Van Dort, M. E.; Robins, D. M.; Wayburn, B. J. Med. Chem. 2000, 43, 3344-3347.  Homma, S., et al., "Differential levels of human leukocyte antigen-class I, multidrugresistance 1 and androgen receptor expressions in untreated prostate cancer cells: the robustness of prostate cancer", Oncol. Rep. 18 (2), 343-346 (2007).  Cai, C., et al., "C-Jun has multiple enhancing activities in the novel cross talk between the androgen receptor and Ets variant gene 1 in prostate cancer", Mol. Cancer Res. 5 (7), 725-735 (2007).  Brockschmidt, F., et al., "The two most common alleles of the coding GGN repeat in the androgen receptor gene cause differences in protein function", J. Mol. Endocrinol. 39 (1), 1-8 (2007).  Hamilton-Reeves, J.M., et al., "Isoflavone-rich soy protein isolate suppresses androgen receptor expression without altering estrogen receptor-beta expression or serum hormonal profiles in men at high risk of prostate cancer", J. Nutr. 137 (7), 1769-1775 (2007).  Sweet, C. R., et al., "A unique point mutation in the androgen receptor gene in a family with complete androgen insensitivity syndrome", Fertil. Steril. 58 (4), 703-707 (1992).  Batch, J.A., et al., "Androgen receptor gene mutations identified by SSCP in fourteen subjects with androgen insensitivity syndrome", Nat. Genet. 1 (

Examiner	Date	
Signature	Considered	

Sut	Substitute for form 1449/PTO			Complete if Known		
				Application Number	10/583,280 - Conf. # 2639	
II.	NFORMATION	1 DI	SCLOSURE	Filing Date	June 16, 2006	
S	STATEMENT BY APPLICANT			First Named Inventor	Charles Sawyers	
				Art Unit	1636	
	(Use as many she	eets as	necess ary)	Examiner Name	Nancy S. Vogel	
Sheet	7	of	7	Attomey Docket Number	58086-232451	

C81	Saunders,P.T., et al., "Point mutations detected in the androgen receptor gene of three men with partial androgen insensitivity syndrome", Clin. Endocrinol. (Oxf) 37 (3), 214-220 (1992).	
C82	Zoppi,S., et al. " Amino acid substitutions in the DNA-binding domain of the human androgen receptor are a frequent cause of receptor-binding positive androgen resistance", Mol. Endocrinol. 6 (3), 409-415 (1992).	
C83	International Search Report issued in PCT Application PCT/US2006/011417, mailed on July 3, 2006.	
C84	International Search Report issued in PCT Application PCT/US2005/005529, mailed on November 10, 2005.	
C85	International Search Report issued in PCT Application PCT/US2004/042221, mailed on June 20, 2005.	
C86	Wang, Long G., et al., "Overexpressed androgen receptor linked to p21WAF1 silencing may be responsible for androgen independence and resistance to apoptosis of a prostate cancer cell line", Cancer Research 61 (20), pp. 7544-7551 (October 15, 2001).	
C87	Shi, Xu-Bao, et al., "Functional analysis of 44 mutant androgen receptors from human prostate cancer", Cancer Research 62 (5), pp. 1496-1502 (March 1, 2002).	
C88	Navone, N. M., et al., "Model Systems of Prostate Cancer: Uses and Limitations" Cancer Metastasis, Kluwer Academic Publishers, Dordrecht, NL, 17 (4), 1999, pp. 361-371.	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Examiner	Date	
Signature	Considered	

<sup>1</sup>Applicant's unique citation designation number (optional). 2Applicant is to place a check mark here if English language Translation is attached.